

Date: Sun, 7 Nov 93 04:30:14 PST
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V93 #103
To: Ham-Ant

Ham-Ant Digest Sun, 7 Nov 93 Volume 93 : Issue 103

Today's Topics:

Chimney mounting a triband beam? Summary
FM Broadcast Antenna?
New antenna problem (2 msgs)
Radio Shack Discone (4 msgs)
Tower Guy Anchors

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 4 Nov 1993 09:32:18 -0600
From: tadpole.com!news.dell.com!swrinde!cs.utexas.edu!not-for-mail@uunet.uu.net
Subject: Chimney mounting a triband beam? Summary
To: ham-ant@ucsd.edu

Hi,

The unanimous wisdom of the net says that this is a bad idea. Chimneys are brittle. They are not designed to take a shear or torsional load, and will come down. A tower is the way to go. BTW many had good things to say about the Radio Shack mount and mast. All of this kind of makes me wonder about some of the huge TV antennas with rotors that many homes in this area have perched on their chimneys.

Thanks to all that replied.

Joe - N3PQA/AE
(landisj@drager.com)

Date: 4 Nov 93 16:35:57 CST
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!europa.eng.gtefsd.com!emory!
news-feed-1.peachnet.edu!ukma!wkuvx1!scottcr@network.ucsd.edu
Subject: FM Broadcast Antenna?
To: ham-ant@ucsd.edu

In article <2b5ot0\$5fi@hp-col.col.hp.com>, jms@col.hp.com (Mike Stansberry)
writes:

> SCOTT J GILBERT (STU_SJGILBER@VAX1.ACS.JMU.EDU) wrote:
> : Can anyone give me a formula for length and/or specs of an FM broadcast
> : antenna? Is the quarter-wave equation an accurate one to use to determine
> : length of a vertical radiating element?
>
> : Many thanks...
>
> : Scott
> : "If this question just don't fit this category, please go easy with those
> : flamethrowers..."
>
> half wave = 468 / 2
> quarter is half of that.
>

A true half wavelength can be determined by 492/ freq in mhz.
(for feet)

The actual construction length to achieve resonance will usually be
shorter, with the amount of shortening affected by 1) relative
diameter of the conductor, effect of and spacing to parasitic
elements or other conductors, and 3) shape.

As an aside, FM broadcast antennas (transmitting) are "ring-and-stub"
or "crossed-dipoles" circularly-polarized elements stacked at
one wavelength apart.

--

SCOTT@WKUVX1.BITNET aka Chris Scott- C/E Public Radio- Western KY U
Telco: (502) 745-3834 Hm & Fax: (502) 781-1232
...just another insignificant VAX user.

Date: 4 Nov 1993 12:55:33 GMT
From: zippy.Telcom.Arizona.EDU!CS.Arizona.EDU!noao!ncar!elroy.jpl.nasa.gov!usc!
howland.reston.ans.net!usenet.ins.cwru.edu!lerc.nasa.gov!news.larc.nasa.gov!
arbd0.larc.nasa.gov!@mvpb.saic.com
Subject: New antenna problem

To: ham-ant@ucsd.edu

In article <2b9mr2INNjo4@charnel.ecst.csuchico.edu> jschlich@ecst.csuchico.edu (Jeff Schlicht) writes:

>I just installed an antenna on the bed railing of my truck.
>The only problem is that when I turn my car on I get a lot
>of interference. This only happens when using the new
>antenna, not when I use my rubber duck. I am hooked into
>the cigarette lighter, but as I said the only time there
>is a problem is when I am using the new antenna and the car is
>on. If the car is off it works great!. I must have some kind
>of grounding problem or something? Please tell me the source
>of my problems.
>
>If this sounds like a stupid question, then Oh well, I am what
>I am.
>
>Thanks,
>
> Jeff

Truck beds are usually mounted on "rubber" shock absorbers. It is possible that the place you have the antenna mounted is not "grounded" (electrically connected to the negative battery post).

--

Joseph M. Zawodny (K04LW)
Internet: zawodny@arbd0.larc.nasa.gov
Packet: ko4lw@n4hog.va.usa

NASA Langley Research Center
MS-475, Hampton VA, 23681-0001

Date: Thu, 4 Nov 1993 16:22:02 GMT
From: pacbell.com!amdahl!netcomsv!netcom.com!greg@decwrl.dec.com
Subject: New antenna problem
To: ham-ant@ucsd.edu

In article <2bau45\$95@reznor.larc.nasa.gov> zawodny@arbd0.larc.nasa.gov (Dr Joseph M Zawodny) writes:

>
>Truck beds are usually mounted on "rubber" shock absorbers. It is possible
>that the place you have the antenna mounted is not "grounded" (electrically
>connected to the negative battery post).

There's 'supposed' to be a grounding strap between such entities on vehicles. It wouldn't surprise me though, though, if it were missing.

Greg

Date: Thu, 4 Nov 1993 16:11:03 GMT
From: pacbell.com!amdahl!netcomsv!netcom.com!greg@decwrl.dec.com
Subject: Radio Shack Discone
To: ham-ant@ucsd.edu

Any experiences with the Radio Shack discone VHF/UHF antenna as a transmitting antenna? It seems to me like it would be a good antenna to have up, both to hit the local repeaters and PBBSs, for use with the scanner, and to have handy in event of an emergency which required communications on frequencies outside the ham bands.

However, I'm a bit suspicious of it, since it comes from the store where their latest price on a base-level laser printer is 800 bucks.

Greg

Date: Fri, 05 Nov 93 09:10:58 EST
From: usc!sol.ctr.columbia.edu!spool.mu.edu!nigel.msen.com!yale.edu!news.yale.edu!
YaleVM.YCC.Yale.Edu!MIKEN@network.ucsd.edu
Subject: Radio Shack Discone
To: ham-ant@ucsd.edu

In article <gregCFz6AG.D4C@netcom.com>
greg@netcom.com (Greg Bullough) writes:

>Any experiences with the Radio Shack discone VHF/UHF antenna as a
>transmitting antenna? It seems to me like it would be a good
>antenna to have up, both to hit the local repeaters and PBBSs,
>for use with the scanner, and to have handy in event of an emergency
>which required communications on frequencies outside the ham bands.

>

>However, I'm a bit suspicious of it, since it comes from the store
>where their latest price on a base-level laser printer is 800 bucks.

>

>Greg

I use the Radio Shack discone for 2m,220 and 70cm and amazingly it works pretty good.It seems to work better the higher in frequency you go. I broke a couple of elements off of the antenna while putting it up and it still works great and has a low SWR. So I would say its not a bad antenna but look around,I have seen the same antenna in some magazine(can't remember which one)for about half the price.

Mike N1JJX@N4GAA.CT.USA.NA

Miken@Yalevm.Ycc.Yale.Edu

Date: Thu, 4 Nov 1993 19:16:39 GMT
From: amd!amdcl2!brian@decwrl.dec.com
Subject: Radio Shack Discone
To: ham-ant@ucsd.edu

In article <gregCFz6AG.D4C@netcom.com> greg@netcom.com (Greg Bullough) writes:
> Any experiences with the Radio Shack discone VHF/UHF antenna as a
> transmitting antenna? It seems to me like it would be a good
>
> Greg

I've had one 2+ years now. It's reasonably rugged, but the finish on the elements wore off after about 1.5 years. I'm not sure what caused this, but it was clearly environmental because the finish only wore off on one side of the antenna.

As a side note to putting the antenna together -- don't overtighten the nut at the top of the antenna! The bolt that this nut screws onto is a single shaft of metal that goes through the black plastic insulator and then becomes the center pin for the SO-239??? connector. It is held in place by the bolt threads embedded in the plastic. My experience has shown (Arrgh!) that if you tighten this nut with a wrench, you'll pull the bolt (and the center pin of the connector) out of the insulator. It's then epoxy time.

Brian McMinn N5PSS brian.mcminn@amd.com

Date: Thu, 4 Nov 1993 22:43:44 GMT
From: mentor.cc.purdue.edu!noose.ecn.purdue.edu!dynamo.ecn.purdue.edu!wb9omc@purdue.edu
Subject: Radio Shack Discone
To: ham-ant@ucsd.edu

mcross@cv.hp.com (Minor_Cross) writes:

>:In article <gregCFz6AG.D4C@netcom.com> greg@netcom.com (Greg Bullough) writes:
>: >Any experiences with the Radio Shack discone VHF/UHF antenna as a
>: >transmitting antenna? It seems to me like it would be a good

>I had one up for a couple of years with no problems! I checked the VSWR
>and it was 1.2:1 or less on 2M and 440. Just remember that it has unity
>gain (or less!).

Yeah, that pretty much echos my experience with it. I don't leave

mine outside, though. I keep it in one of those cardboard map tubes and use it when I go do other stuff. I took it with me in August to the Great Smokey Mountains National Park, and sat up in the parking area at Clingman's Dome - this is the highest peak in the park at 6,642 feet. After ten meters proved to be largely a washout (you know the band sucks when you can't even do well with a 6600 foot tower under you) (although I did work a station in Brazil), I set up the RS discone on an aluminum tube and hooked my HT up to it. All in all it performed pretty well.

As usual from that mountain you can just about forget working any common repeater splits - you bring up so many of them (even on low power) that you can't hear ANY of them! Nothing but a mass of whining and squealing sounds. :-)) I just go in the repeater guide and pick out those on less common splits and nail em down. You can work into Georgia, North Carolina, South Carolina, Virginia and west into western Tennessee without too much trouble at all. Simplex is also great fun - you can throw out your call on 146.52 and get a LOT of answers.

I digress. The RS discone was good for this - I had preassembled the center hub. All I had to do was screw in the elements, and hook everything else up and go. Took a few minutes, no more. Same taking it back down again.

I can't say I'd recommend it for any serious 2 meter DX, but for a cheap (well.....) quick and dirty antenna with reasonable omnidirectional response, it isn't too bad.

Duane
WB9OMC

Date: Thu, 4 Nov 1993 16:24:53 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!sol.ctr.columbia.edu!
jabba.ess.harris.com!mlb.semi.harris.com!controls.ccd.harris.com!
drs@network.ucsd.edu
Subject: Tower Guy Anchors
To: ham-ant@ucsd.edu

I've been a ham since 1962 and am still afraid of heights. I think the reason is because of my lack of confidence in the structure I'm standing on.

I'm about to re-do my guying on my Rohn 25 tower so I can go from the measly 40 feet up to around 68 feet. MY problem is what is a cheap but good method of guying my tower? I live in Florida (sandy soil). I presently use house trailer screw anchors. They seem to be ok. I plan on using the standard 3/16 steel cable and have two levels of guying, one at around 35 ft and another just short of the 68 ft level. I plan on putting up a

3 element tribander, or my present 20 meter 3 element monobander.

Any advice? I know I can pour many yards of concrete and solve the problem. I want something that I will have extreme confidence in while I'm hanging from the top. Another point is that two of the anchors will be the recommended distance from the base of the tower, but one of them will be in the vicinity of 40 ft from the base (a little close but the yard ends there).

Thanks, Doug, N4IJ

Date: 5 Nov 1993 09:56:45 -0500
From: usc!sdd.hp.com!news.cs.indiana.edu!babbage.ece.uc.edu!ucunix.san.uc.edu!
ucunix.san.uc.edu!not-for-mail@network.ucsd.edu
To: ham-ant@ucsd.edu

References <4307@tekgen.bv.tek.com>, <mbuttsCFvnAt.9zs@netcom.com>,
<2b8tip\$1hl@wrdis02.robins.af.mil>ucuni
Subject : Re: Archery Advice for Antenna Raising

To change the subject slightly, if you haven't got a bow handy, you can always use a slingshot. Copying from a buddy's design, I cut out a yoke from 3/4-in plywood, put two machine bolts through the arms, and put on a thong-and-rubber set from Crossman I picked up at K-mart for \$3. That and a \$5 Zebco reel complete the outfit. I use a 1-oz sinker as the ammo. Have been able to pass a line over any tree I've tried so far (but I did go out to the ball diamond in the park nearby to practice, first!).

Theodore Allan (Ted) Morris, University of Cincinnati Medical Center,
513-558-0177V, -2682F, MORRIS@UCUNIX.SAN.UC.EDU, MORRISTA@UC.EDU, WB8VNV
Previous politically-incorrect tag-line removed.

Date: 5 Nov 1993 10:03:04 -0500
From: usc!sdd.hp.com!news.cs.indiana.edu!babbage.ece.uc.edu!ucunix.san.uc.edu!
ucunix.san.uc.edu!not-for-mail@network.ucsd.edu
To: ham-ant@ucsd.edu

References <mbuttsCFvnAt.9zs@netcom.com>, <2b8tip\$1hl@wrdis02.robins.af.mil>,
<2bdpjd\$abg@ucunix.san.uc.edu>
Subject : Re: Archery Advice for Antenna Raising

Sorry, one addition: the reel and -2 hose clamps- complete the outfit.
I made two yokes; the second has a little longer handle, since I found I

was hitting my thumb on the hose clamps on the first one, when holding it up to shoot.

Theodore Allan (Ted) Morris, University of Cincinnati Medical Center,
513-558-0177V, -2682F, MORRIS@UCUNIX.SAN.UC.EDU, MORRISTA@UC.EDU, WB8VNV
Previous politically-incorrect tag-line removed.

Date: Fri, 5 Nov 1993 16:51:12 GMT
From: infonode!npmo!rvhoeft@uunet.uu.net
To: ham-ant@ucsd.edu

References <4307@tekgen.bv.tek.com>, <mbuttsCFvnAt.9zs@netcom.com>,
<2b8tip\$1hl@wrdis02.robins.af.mil>
Subject : Re: Archery Advice for Antenna Raising

I've been reading with interest about the various methods and techniques used to get wire antennas raised. Bow and arrows are quite efficient and I know Bob, K4MLR is rated "Field Day SharpShooter" with a slingshot and sinker. I also recall a quite humorous article in 73 Magazine in the mid-80s about arrows and antennas with an arrow crashing through a neighbor's window and lawyers and all sorts of neat stuff.

But has anyone ever tried the ol' golf ball and eye screw technique??

This past summer, I got the crazy idea that I needed to move a dipole and change its directivity to a more northeast - southwest setup. I had tried the fishing pole method with little success and K4MLR was on vacation. 'Lookee here an old golf ball. Hmmm. I've got these eye screws and this 1/8 inch nylon cord. Let's see what I can do.'

Well, let's just say right off that this method is neither effective or efficient. After about 20 minutes of hurling the golf ball into a tree and the XYL giving me that all too familiar 'what is this HR guy doing now?'" look, (now don't tell me you never seen this look before!!) I finally got the ball positioned where I wanted it - almost.

It seems that the ball had just enough energy to clear the branch, snag the cord on the tree bark and do a loop-de-loop around the branch. No problem. I'll just pull on the cord and either the eye screw will pull out or the branch will break. The branch is only an inch or so thick; it should snap right off. WRONG!!! I pulled and pulled and tugged and tugged. Change direction - pull. Change direction - tug. After another 20 minutes or so - SNAP. The branch broke from the tree but was still attached at the bark.

(Note that Roger is TOO DAMN STUBBORN to cut his losses, cut the line, go inside, and have a tall cold one!)

OK. I'm just about there. Just pull some more and the branch will break free. I know now how strong southern pines are. It's getting dark. After another 10 minutes or so of pulling - my upper arms are rubber.

PULLLLLLLLLL - SNAP!!! (It was the cord this time.)

Before I go on, let me say that 1/8 inch nylon cord does not normally stretch.

Before I fell to the ground, 40 feet or so of cord let go and buried itself into my chest. the cord hit me with so much energy that it knocked the wind out of me and put the prettiest little welts on my chest.

Today, the branch and golf ball are still hanging in the tree as a memorial to my "enjoyment" of the amateur radio hobby. The dipole is still in its original location.

Guys, cross this method off your list.

de KA9EKJ

... Did I ever tell you how I lodged my son's T-ball in a tree??

Date: Thu, 4 Nov 1993 05:49:54 GMT
From: netcon!bongo!julian@locus.ucla.edu
To: ham-ant@ucsd.edu

References <4307@tekgen.bv.tek.com>, <fmitchCFuEyq.D1o@netcom.com>,
<1993Nov3.030919.4621@mulvey.com>d.com
Subject : Re: Archery Advice for Antenna Raising

In article <1993Nov3.030919.4621@mulvey.com> rich@mulvey.com writes:
>

> Then again, it can be a ROYAL pain to get your hands on a slingshot
>these days. I had to call almost 2-dozen camping/toy/etc stores here in
>Rochester, NY a few months ago before I found one. The clerks told me
>that very few stores sell them now because of insurance liability.

K Mart carries them. I bought one there recently.

--

Julian Macassey, N6ARE. julian@bongo.tele.com

End of Ham-Ant Digest V93 #103
